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# In Cell Examination System

## Problem

The INEEL's Integrated Spent Nuclear Fuel Program needed to visually examine highly radioactive nuclear reactor fuel elements and determine their fissile material content.

#### Baseline Technology

Visual examination and destructive analysis at a separate INEEL facility.

#### Innovative Technology

The In Cell Examination System is a remotely operated device that visually inspects and non-destructively analyzes highly radioactive spent fuel elements.

### Comparison

This system enabled visual examination and non-destructive analysis of spent fuel elements at the receiving facility.

# Benefits

Use of this system resulted in an estimated cost avoidance of over \$1 million by eliminating spent fuel element transfer and destructive analysis.

#### SPENT NUCLEAR FUEL PROGRAM

Project: ID-SNF-102 Integrated Spent Nuclear Fuel Program